

**OPINIONS AND DECLARATIONS  
RENDERED BY THE INTER-  
NATIONAL COMMISSION ON  
ZOOLOGICAL NOMENCLATURE**

*Edited by*

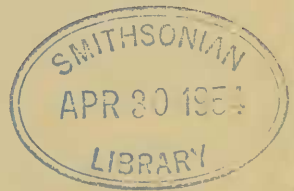
**FRANCIS HEMMING, C.M.G., C.B.E.**

**Secretary to the Commission**

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**OPINION 224**

Determination, under the Plenary Powers, of the species  
of the Class Brachiopoda to which the name *Anomia*  
*pecten* Linnaeus, 1758, shall apply



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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

## COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 224

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### C. Alternate Members of the Commission at the Session held in Paris in 1948

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Professor Robert L. USINGER (*University of California, Berkeley, California, U.S.A.*).

## OPINION 224

### DETERMINATION, UNDER THE PLENARY POWERS, OF THE SPECIES OF THE CLASS BRACHIOPODA TO WHICH THE NAME "ANOMIA PECTEN" LINNAEUS, 1758 SHALL APPLY

**RULING** :—(1) Under the Plenary Powers it is hereby directed that the specific name *pecten* Linnaeus, 1758, as published in the combination *Anomia pecten*, shall apply to the species of the Class Brachiopoda described and figured as *Orthis pecten* (Linnaeus) by Dalman (J.W.) in 1828 (*K. svensk. Vetensk. Acad. Handl.* 1827 : 110, pl. 1, figs, 6a—d).

(2) The following specific names are hereby placed on the *Official List of Specific Names in Zoology* as Names Nos. 34 and 35 :—(a) *pecten* Linnaeus, 1758, as published in the combination *Anomia pecten* and as determined in (1) above ; (b) *papyraceus* Sowerby (J.), 1822, as published in the combination *Pecten papyraceus*.

#### I.—THE STATEMENT OF THE CASE

In September 1938 Dr. Alan Wood (*Department of Geology, Imperial College of Science and Technology, London*) submitted an application to the International Commission on Zoological Nomenclature for the use of its Plenary Powers to secure that the specific name *pecten* Linnaeus, 1758, as published in the combination *Anomia pecten*, should apply to the species of Brachiopod commonly known by that name and not to the lamellibranch species to which the figure cited by Linnaeus is

referable. Dr. Wood's application, slightly expanded in the light of subsequent correspondence with the Secretary, was as follows :—

**Proposed suspension of the "Règles" to identify "Anomia Pecten"  
Linnaeus, 1758, with the species belonging to the Order Protremata  
(Class Brachiopoda) commonly known as "Strophomena  
Pecten" (Linnaeus, 1758)**

By ALAN WOOD, Ph.D.

(Department of Geology, Imperial College of Science and Technology,  
London)

Linnaeus, in 1758, *Syst. Nat.* (ed. 10) 1 : 702, described a fossil shell under the name *Anomia pecten* in the following words :—

103. A. testa semi-orbiculata depressa multistriata : valvula altera plana.

*List. angl.* 243. t. 9. f. 49.

*Habitat* . . . . *fossilis*.

*Testa inferne s. margine cardinis linea recta s. transversa*.

No locality was given by Linnaeus, as will be seen from the above quotation, but a specimen is contained in his cabinet at the Linnean Society of London.

Lister's figure cited by Linnaeus, is of a specimen "ex fodinis carbonum Fossilium juxta Hallifax", and is quite recognisable as the lamellibranch *Dunbarella papyracea* (J. Sowerby, 1822) (= *Pecten papyraceus* Sowerby, 1822, *Min. Conch.* 4 : 75 pl. 354), which is known to occur in the Halifax Hard Marine Band in the Coal Measures. This is the species widely known as *Pterinopecten papyraceus* (Sowerby, 1822). The description given by Linnaeus quoted above could be held to apply to this shell.

On the other hand, the shell preserved in the Linnean cabinet is a Silurian brachiopod to which the name *Strophomena pecten* (Linnaeus, 1758) has long been given. This is the species now known as *Schuchertella pecten* (Linnaeus, 1758). This Silurian form is the shell with which Linnaeus was actually dealing, and knowledge of its characteristics was spread by personal contact among Swedish palaeontologists, till Dalman in 1828 (*K. Vet. Akad. Handl.* 1827) published typical figures.

By strict application to the rules, it would seem that the trivial name *papyraceus* Sowerby should be displaced by *pecten* Linnaeus, and that the brachiopod long known as *Strophomena pecten* (Linnaeus, 1758) is without a valid trivial name.

Since both *Pterinopecten papyraceus* (Sowerby, 1822) and *Strophomena pecten* (Linnaeus, 1758) are widely distributed shells, cited by

many authors for more than 100 years, strict application of the rules in this case would lead to confusion. It is, therefore, asked that the Rules be suspended in this case, so that the trivial name *pecten* Linnaeus, 1758, can be applied to the Silurian brachiopod now commonly known as *Strophomena pecten* (Linnaeus, 1758).

## II.—THE SUBSEQUENT HISTORY OF THE CASE

2. On receipt, the papers relating to the present case were given the Registered Number Z.N.(S.) 130. It had not been found possible to advance the consideration of the present application by the time that the outbreak of war in Europe in September 1939 led to the evacuation of the records of the International Commission from London to the country as a precaution against the risk of destruction through air raids. The Secretariat in London was re-opened in 1942, and steps were immediately taken to establish the *Bulletin of Zoological Nomenclature* as a means for bringing to the attention of zoologists applications submitted to the International Commission for decision. Work was at once started on outstanding applications with a view to arranging for their publication in the newly established *Bulletin*. After an exchange of correspondence between the Secretary and the applicant in the early autumn of 1944, the present application was sent to the printer in October of that year. Owing, however, to difficulties arising from paper rationing, shortage of labour at the printing works and similar causes publication did not actually take place until 28th February 1947 (Wood, 1947, *Bull. zool. Nomencl.* 1 : 239).

3. The publication of Dr. Wood's application in the *Bulletin* elicited support from :—(1) Dr. Th. Mortensen (*Universitetets Zoologisk Museum, Copenhagen*) ; (2) the Joint Committee on Zoological Nomenclature for Paleontology in America ; (3) Dr. Joshua L. Baily, Jr. (*San Diego, California, U.S.A.*). The comments so received are quoted in the following paragraphs.

4. *Comment by Dr. Th. Mortensen (Universitetets Zoologisk Museum, Copenhagen)* : In a letter dated 8th April 1947 Dr. Th.

Mortensen (*Universitetets Zoologisk Museum, Copenhagen*) indicated his support for Dr. Wood's proposal by writing the word "Yes".

5. *Comment by the Joint Committee on Zoological Nomenclature for Paleontology in America*: The view of the Joint Committee on Zoological Nomenclature for Paleontology in America on this case was submitted in a letter dated 5th November 1947 from Dr. J. Brookes Knight (*Research Associate, United States National Museum, Washington, D.C., U.S.A.*), who at that time was Chairman of the Joint Committee. The following is the text of the letter :—

Proposed suspension of the "Règles" to identify "Anomia pecten" Linnaeus, 1758, with the species belonging to the Order Protremata (Class Brachiopoda) commonly known as "Strophonema pecten" (Linnaeus, 1758). (Bull. zool. Nom. vol. 1, pt. 10, p. 239.)

On July 3rd, 1947, the Chairman of the Joint Committee on Zoological Nomenclature for Paleontology in America submitted to the membership of the Committee for consideration and approval a resolution on the above proposal. This resolution (as well as some others submitted on the same date) was the result of a recommendation of Prof. Gayle Scott, a former member of the Committee. Since it contains some points that may be relevant to the Commission's consideration of Dr. Wood's petition the Chairman's letter laying the resolution before the Committee is quoted :—

Professor Scott's recommendation reads as follows :—

My thought is that this request should be for the Commission's authority of stabilisation rather than for suspension of the Rules. After all, Linnaeus was describing the shell since commonly known as the Silurian brachiopod *Strophomena pecten*. It should scarcely require a suspension of the Rules to so order it.

Comments. I don't quite understand Professor Scott's remark that this is a case for "stabilisation" rather than for suspension of the *Règles*. I presume he feels that, because the concept was spread among Swedish paleontologists by personal contact that the name referred to the brachiopod and that a specimen of the brachiopod was long afterward found in Linnaeus' collection, all the Commission has to do is to "stabilise" what had long since been customary. On the other hand, I would argue that Linnaeus

in his original proposal of the species, *Anomia pecten*, gave a precise bibliographic reference to a specimen figured by Lister that is "quite recognisable as the lamellibranch" later described as *Pecten papyraceous* Sowerby. He gave a description that could apply to that species (as well as the brachiopod) and that he gave no other "indication". This specimen, then, was his figured type, so to speak. All of this was published information. The information spread by personal contact and the specimens in his collection were unpublished. Therefore this unpublished, esoteric information, however influential on contemporaries, cannot stand legally as against a contrary published and very definite indication. Therefore, it appears to me that Doctor Wood's statement that the trivial name *papyraceous* of Sowerby must be replaced by its senior synonym *pecten* of Linnaeus, a lamellibranch, is legally correct. Hence if the trivial name *pecten* is to continue to be applied to the brachiopod, it can only be done legally under suspension of the *Règles*.

In view of these facts and of the evident confusion that would result if the *Règles* are applied, I propose the following resolution for your action :—

RESOLVED : That the Joint Committee on Zoological Nomenclature for Paleontology in America support the petition of Dr. Alan Wood that the trivial name *pecten* Linnaeus (*Anomia pecten* Linnaeus, 1758), be applied to the brachiopod species now commonly known as *Strophomena pecten* (Linnaeus) under suspension of the *Règles* and that the specimen preserved in the Linnaean Cabinet be designated its holotype.

The vote of the membership was 9 for approval of the Resolution, Romer, Simpson, Newell, Palmer, Cooper, Moore, Keen, Reeside, in the affirmative and 2, Wells and Frizzell in the negative. Stenzel was away and did not vote.

Comments on those voting in the affirmative were as follows :—

Cooper—Vote Aye for petition to fix *Anomia pecten* as the name of a brachiopod now known as *Fardenia* (*Strophomena*) *pecten*.

Reeside—Yes, but do not think Commission should designate specimens.

Frizzell, voting in the negative commented as follows :—

There is no problem here, and hence no Suspension of Rules is required! Linné's existing holotype (and not a figure included as a synonymic reference!) is the last court of appeal in regard to the biological entity to which he applied the name. I am opposed to designation of type specimens by the Commission (except as a last resort in exceptional cases, perhaps), and I certainly should not want the precedent started unnecessarily.

Cooper's comment is to be interpreted as indicating that some specialists in brachiopoda (as Cooper) now refer *Anomia pecten* Linnaeus to *Fardenia* Lamont, 1935, rather than to *Strophomena*.

The Chairman personally desires to go on record as disagreeing with Frizzell on every issue raised in his comment and with Reeside on the issue he raises. According to the premises the specimen in Linné's cabinet has never been designated as "holotype" in any publication. A specimen illustrated in a synonymic reference is technically every bit as available for type designation as any specimen in the cabinet of the author proposing the name. The author definitely included that figured specimen in his species and hence there are no valid grounds for excluding it as unavailable until such time as some other available specimen is selected. Indeed, to workers with no personal contact with the author or his collection the figured specimen is the only one that is presented to them for independent objective determination of what species the name was applied to. This is the function—and only function—of the type. If the Commission does not have the power to adjudicate differences of opinion as to what is the type specimen of a species or to set aside a technically valid selection of a type species under the Plenary Powers, then it is cut off from jurisdiction over what is in the final analysis the most vital nomenclatural act that can be performed, the nomenclatural act that gives concrete referents for the whole elaborate framework of zoological nomenclature that without such concrete referents deals entirely with abstractions. This is unthinkable. The act of designating the type of a species is a nomenclatural act, not a zoological one as some seem to suppose. (See Simpson, G. G., Types in modern taxonomy. *Amer. J. Sci.*, vol. 238, p. 413—431).

In view of the above vote, the Joint Committee hereby transmits to the International Commission the Resolution adopted.

6. *Comment by Dr. Joshua L. Baily, Jr. (San Diego, California, U.S.A.)*: The following comment was received from Dr. Joshua L. Baily, Jr. (*San Diego, California, U.S.A.*) under cover of a letter dated 13th December 1947:—

It would appear to me wise to grant this request, otherwise we should have a species called *Pterinopecten pecten*, and as this was originally described as a *Pecten* we would have potentially *Pecten pecten*. Repeated names like this are objectionable unless they are names of generitypes, which this is not.

Nothing helps to stabilise nomenclature so much as rulings by the Commission, and every time a ruling is published, I feel intensely grateful to the Commission, even though its decision differs from what mine would have been.



7. *Issue of Public Notices* : On 29th September 1947 a notice of the possible use, by the International Commission on Zoological Nomenclature, of its Plenary Powers in the present case was issued to the serial publications prescribed by the Ninth International Congress of Zoology, Monaco, 1913. The publication of this notice elicited no objection to the action proposed.

#### THE DECISION BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

8. The present application was considered by the International Commission on Zoological Nomenclature at the Fourteenth Meeting of its Paris Session held at the Sorbonne in the Amphithéâtre Louis-Liard on Monday, 26th July 1948 at 2030 hours. The following is an extract from the Official Record of the Proceedings of the International Commission setting out the decision reached by it in regard to this case at the foregoing meeting (Paris Session, 14th Meeting, Conclusion 7) (1950, *Bull. zool. Nomencl.* 4 : 435—436) :—

THE COMMISSION agreed :—

- (1) to use their Plenary Powers to direct that the trivial name *pecten* Linnaeus, 1758 (as published in the binominal combination of *Anomia pecten*) should apply to the species of the Order Protremata of the Class Brachio-poda, commonly known as *Strophomena pecten* (Linnaeus, 1758), i.e. the species determined as *Schellwienella pecten* (Linnaeus, 1758) by Dalman (J.W.), 1828, *K. svenska Vetensk. Akad. Handl.*, 1827 : 110 pl. 1, figs. 6a—d (as *Orthis pecten*) ;
- (2) to place the undermentioned trivial names on the *Official List of Specific Trivial Names in Zoology* :—
  - pecten* Linnaeus, 1758 (as published in the binominal combination *Anomia pecten*), as identified in (1) above ;

*papyraceus* Sowerby, 1822 (as published in the binominal combination *Pecten papyraceus*);

- (3) to render an *Opinion* recording the decisions specified in (1) and (2) above.

9. The following are the original references for the names which appear in the decision set out in the immediately preceding paragraph :—

*papyraceus*, *Pecten*, Sowerby (J.), 1822, *Min. Conch.* **4** : 75  
*pecten*, *Anomia*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 702

10. The decision taken in the present case was reported to, and approved by, the Section on Nomenclature of the Thirteenth International Congress of Zoology, Paris, 1948, at its Sixth Meeting held on 26th July 1948 (1950, *Bull. zool. Nomencl.* **5** : 113).

11. The Ruling given in the present *Opinion* was concurred in by the sixteen (16) Commissioners and Alternate Commissioners present at the Paris Session of the International Commission, namely :—

Beltrán *vice* Cabrera ; Boschma ; Bradley ; di Caporiacco ; Hemming ; Hindle *vice* Jordan ; Jorge *vice* do Amaral ; Kirby *vice* Stoll ; Lemche *vice* Dymond ; Mansour *vice* Hankó ; Metcalf *vice* Peters ; Riley *vice* Calman ; Rode ; Spärck *vice* Mortensen ; van Straelen *vice* Richter ; Usinger *vice* Vokes.

12. The Ruling given in the present *Opinion* was dissented from by no Commissioner or Alternate Commissioner present at the Paris Session.

13. At the time of the adoption of the Ruling given in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology*, the word "trivial" appearing also in

the title of the *Official Index* reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953, *Copenhagen Decisions zool. Nomencl.* : 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.

14. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

15. The present *Opinion* shall be known as *Opinion* Two Hundred and Twenty-Four (224) of the International Commission on Zoological Nomenclature.

DONE in London this First day of December, Nineteen Hundred and Fifty-Three.

*Secretary to the International Commission  
on Zoological Nomenclature*

FRANCIS HEMMING

